ABSTRACT

BACKGROUND: Gestational diabetes mellitus (GDM) is associated with undesirable complications on the mother and newborn. First trimester hba1c levels between 5.3%-≥6% developed GDM (V seshiah et al) and hba1c levels ≥6.5%had overt DM ,thus pre-gestational diabetes is detected in the first trimester and treated.Hba1c may be measured anytime of the day, has less biological variation, higher reproducibility and better analytical stability compared to glucose measurements. The aim of this study is to analyze the prognostic value of HBA1C test in detecting gestational diabetes mellitus, based on 75gm OGTT (DIPSI guidelines) as the reference test.

METHODS: It is a prospective cohort study conducted in 100 pregnant women (of 8-13weeks of gestational age) in department of obstetrics and gynaecology ,Stanley medical college between October 2016-september2017.hba1c test and OGTT are done in the first trimester. Pregnant women with OGTT >140 gm /dl and hba1c ≥6.5% were excluded from the study and treated others were followed up. The results were analysed and tabulated.

CONCLUSION: First trimester HBA1C ≥5.5% in high risk group is useful in predicting pregnant women who develops GDM, so they must be given appropriate advice of diet and lifestyle modification early in pregnancy. Respiratory distress syndrome, shoulder dystocia, hypoglycaemia ,APGAR 1 minute ,preeclampsia,macrosomia are highly significant between the groups with HBA1C ≥5.5%Thus first trimester HBA1C helps in predicting adverse maternal and foetal outcomes.

KEYWORDS: first trimester HBA1C, Gestational diabetes mellitus, screening pregnant women, OGTT.